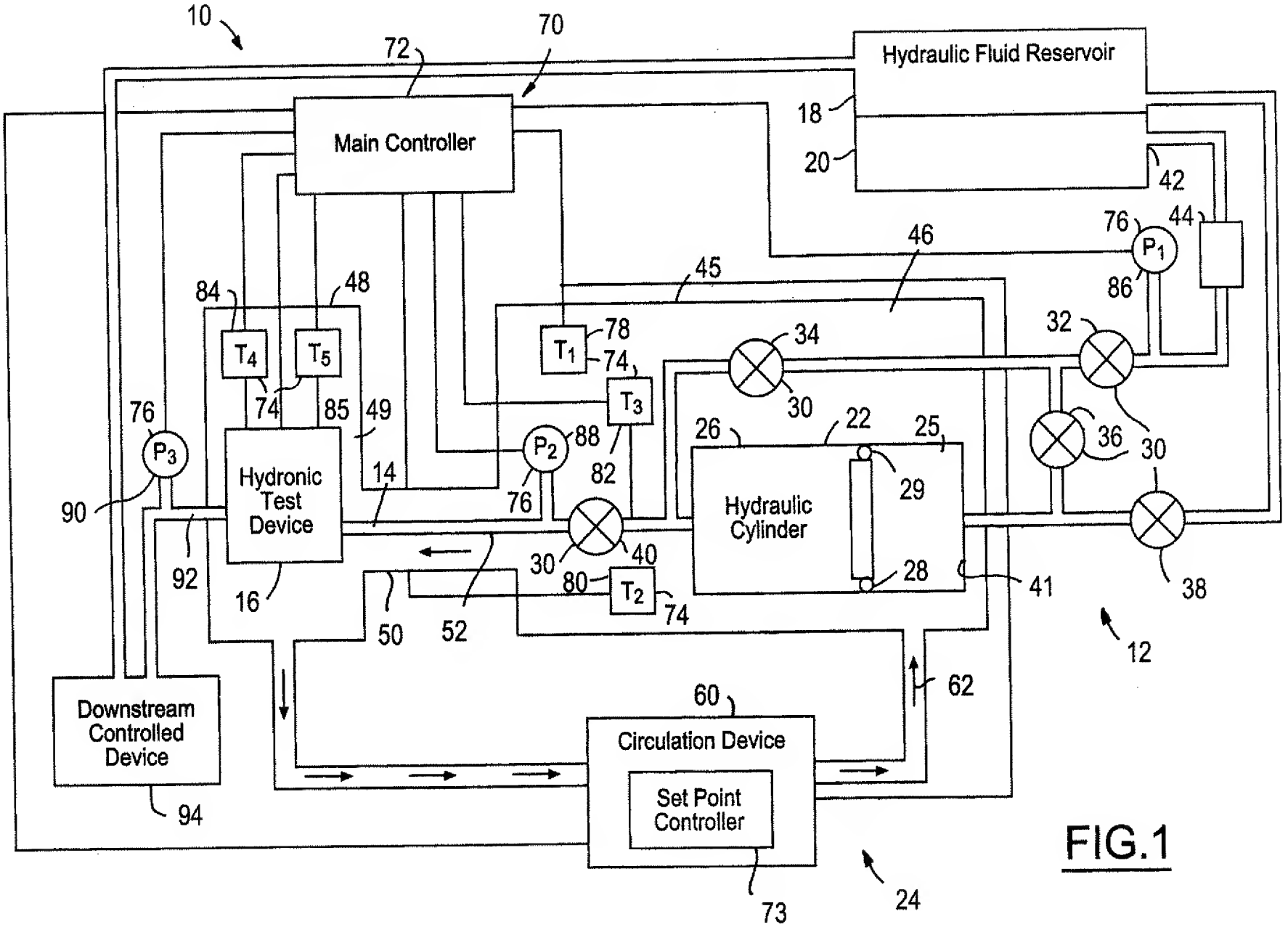
10
70
72
Hydraulic Fluid Reservoir
Main Controller
18
20
42
76
44
P_1
86
46
45
84
48
T_4
T_5
74
85
49
T_1
78
74
T_3
34
30
32
36
30
76
P_3
90
Hydronic Test Device
14
P_2
88
82
76
26
22
25
Hydraulic Cylinder
29
28
41
38
92
16
30
40
80
T_2
74
50
52
12
62
60
Downstream Controlled Device
Circulation Device
Set Point Controller
94
73
24

FIG.1

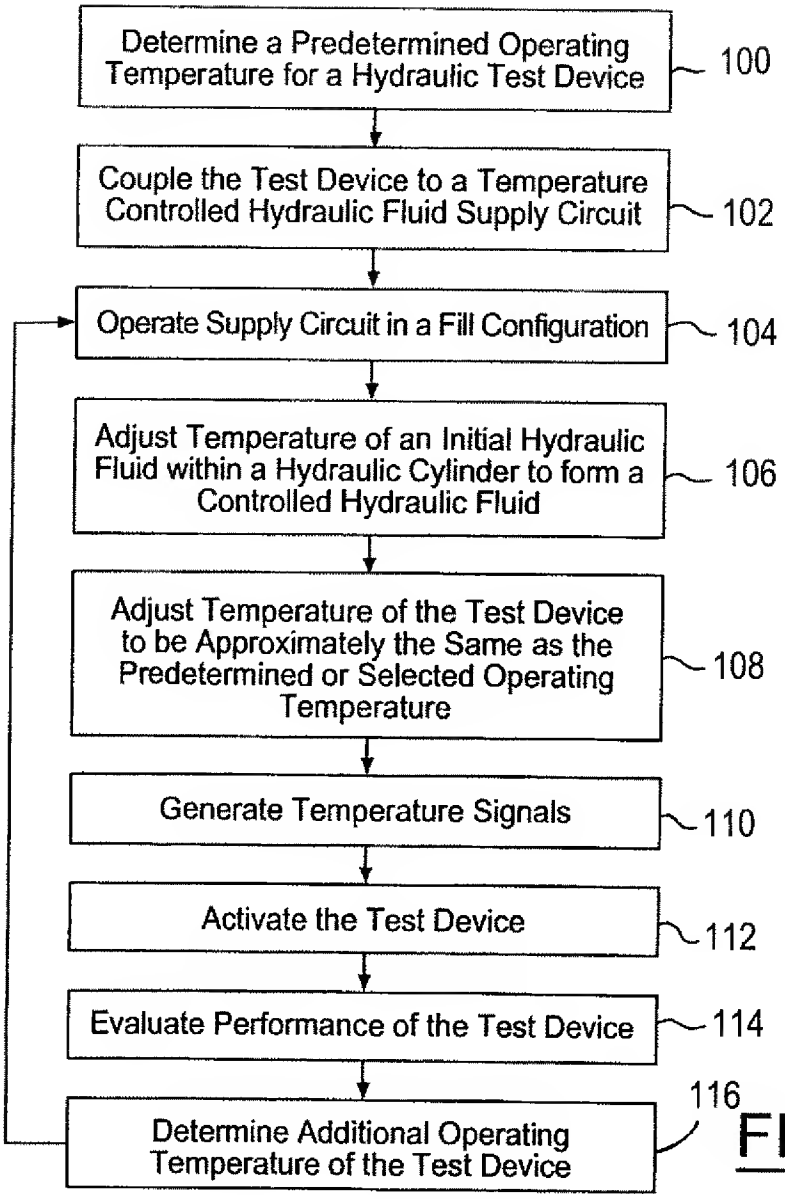
Determine a Predetermined Operating Temperature for a Hydraulic Test Device
100
Couple the Test Device to a Temperature Controlled Hydraulic Fluid Supply Circuit
102
Operate Supply Circuit in a Fill Configuration
104
Adjust Temperature of an Initial Hydraulic Fluid within a Hydraulic Cylinder to form a Controlled Hydraulic Fluid
106
Adjust Temperature of the Test Device to be Approximately the Same as the Predetermined or Selected Operating Temperature
108
Generate Temperature Signals
110
Activate the Test Device
112
Evaluate Performance of the Test Device
114
Determine Additional Operating Temperature of the Test Device
116

FIG.2

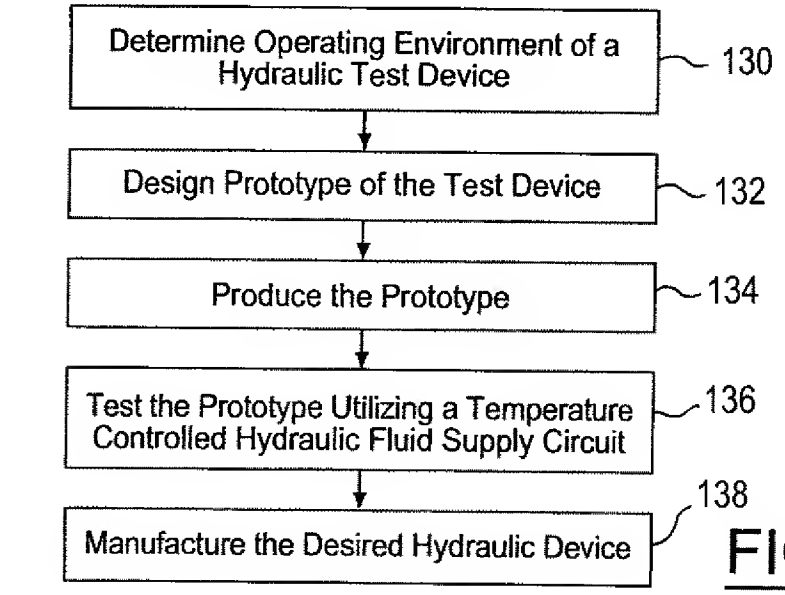
Determine Operating Environment of a Hydraulic Test Device
130
Design Prototype of the Test Device
132
Produce the Prototype
134
Test the Prototype Utilizing a Temperature Controlled Hydraulic Fluid Supply Circuit
136
Manufacture the Desired Hydraulic Device
138

FIG.3